

What is claimed is:

1. A method for modulating endoreduplication in a plant or part thereof which comprises modifying expression or activity of *E2Fa*.
2. A method for modulating endoreduplication in a plant or a part thereof which comprises modifying expression or activity of *E2Fa* and *DPa*.
3. The method of claim 1 wherein *E2Fa* is overexpressed in said plant or plant part.
4. The method of claim 2 wherein *E2Fa* and *DPa* are overexpressed in said plant or plant part.
5. A plant cell which overexpresses a native *E2Fa* gene.
6. A transgenic plant cell comprising an *E2Fa* transgene.
7. A plant cell selected from the group consisting of a plant cell which overexpresses a native *E2Fa* gene and a native *DPa* gene, a plant cell which expresses an *E2Fa* transgene and a *DPa* transgene, a plant cell which expresses an *E2Fa* transgene and overexpresses a native *DPa* gene, and a plant cell which overexpresses a native *E2Fa* gene and expresses a *DPa* transgene.
8. A plant or part thereof comprising plant cells according to claim 5.
9. A plant or part thereof comprising plant cells according to claim 6.
10. A plant or part thereof comprising plant cells according to claim 7.
11. The plant or part thereof according to claim 8 which exhibits modulated endoreduplication.
12. The plant or part thereof according to claim 9 which exhibits modulated endoreduplication.
13. The plant or part thereof according to claim 10 which exhibits modulated endoreduplication.

14. Progeny of the plant of claim 8.
15. Progeny of the plant of claim 9.
16. Progeny of the plant of claim 10.
17. Plant material obtained from the plant of claim 8 or 11.
18. Plant material obtained from the plant of claim 9 or 12.
19. Plant material obtained from the plant of claim 10 or 13.
20. The plant material according to claim 17 comprising at least one of flowers, fruit, leaves, pollen, seeds or tubers.
21. The plant material according to claim 18 comprising at least one of flowers, fruit, leaves, pollen, seeds or tubers.
22. The plant material according to claim 19 comprising at least one of flowers, fruit, leaves, pollen, seeds or tubers.